

10/518444
DT01 Rec'd PCT/CTO 20 DEC 2004

Docket No.: 2611-0228PUS1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE X✓

In re Patent Application of:
Wataru MATSUMOTO

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: December 20, 2004

Art Unit: N/A

For: METHOD AND APPARATUS FOR
GENERATING CHECK MATRIX

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

A copy of each reference on the PTO/SB/08 is attached. Please note that JP-A-2001-168733 corresponds to U.S. Patent 6,715,121-B1; and JP-A-6-223095 and JP-A-6-223096 both correspond to EP-A2-0 611 054.

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A concise explanation of relevance of the items listed on form PTO/SB/08 is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

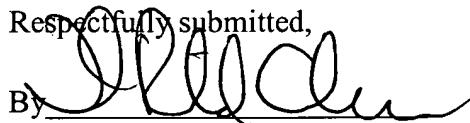
It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 02-2448, under Order No. 2611-0228PUS1. A duplicate copy of this paper is enclosed.

Dated: December 20, 2004

DRA/clb

Respectfully submitted,

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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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Substitute for form 1449A/B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	Not Yet Assigned
Sheet	1	of	1	Filing Date	December 20, 2004
				First Named Inventor	Wataru MATSUMOTO
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Attorney Docket Number	2611-0228PUS1				

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)	MM-DD-YYYY		
AA	US-6,715,121-B1	03-30-2004	LAURENT		

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
BA	JP-2001-168733-A	06-22-2001			
BB	JP-6-223095-A	08-12-1994			
BC	JP-6-223096-A	08-12-1994			
BD	EP-0 611 054-A2	08-17-1994			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS						T ²
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
		R.G. GALLAGER., "Low-Density Parity-Check Codes", Cambridge, MA: MIT Press, 1963.	Y. KOU et al., "Low Density Parity Check Codes Based on Finite Geometries: A Rediscovery," ISIT 2000, pp.200, Sorrento, Italy, June 25 to 30, 2000.	LUDY et al., "Improved Low-Density Parity-Check Codes Using Irregular Graphs and Belief Propagation", Proceedings of 1998 IEEE International Symposium of INformation Theory, pp. 171, Cambridge, Mass., August 16 to 21, 1998.	RICHARDSON et al., "The capacity of low-density parity-check codes under message-passing decoding", IEEE Trans. Inform. Theory, vol. 47, No. 2, pp. 599 to 618, Feb. 2001.	CHUNG et al., "Analysis of Sum-Product Decoding of Low-Density Parity-Check Codes Using a Gaussian Approximation", IEEE Tans. Inform. Theory, vol. 47, No. 2, pp. 657 to 670, Feb. 2001.
CF	J. ROSENTHAL, P.O. VONTOBEL, "Construction of LDPC codes using Ramanujan graphs and ideas from Margulis", in Proc. of the 38th Allerton Conference on Communication, Control, Computing, 2000, pp. 248-257.					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Examiner Signature		Date Considered	
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